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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,949	09/10/1999	KAVITA RAMANAN	1-1	3522

7590

08/10/2004

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EXAMINER

HYUN, SOON D

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 08/10/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/393,949

Applicant(s)

RAMANAN ET AL.

Examiner

Soon D Hyun

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 14-16, 27 and 28 is/are rejected.
- 7) ☒ Claim(s) 4-13 and 17-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>13/May 21, 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 14-16, 27 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by McConnell et al (U.S. Patent No. 6,108,307).

Regarding claims 1, 3, and 28, McConnell et al (McConnell) discloses a processor implemented method of scheduling data packets for transmission over a communication link in a network, the method comprising the steps of:

computing delay measures for a plurality of packets including at least one packet (a Frame Relay message in FIG.1) from each of a plurality of queues Q1-Q4 in FIG. 3), i.e., measuring a current age (delay in the queue) of the message at the head of each queue (col. 7, lines 48-50); and

selecting a given one of the plurality of packets for transmission based on at least in part on a comparison of weighted version of the computed delay measures, such that the selected packet is the packet having the largest weighted delay associated therewith (col. 8, line 10-col. 9, line 10).

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Examiner understands that the weighed version of the computed delay and the largest weighted are equivalent to the congestion severity status for each queue and the highest congestion status, respectively, because the congestion severity is determined by Age Severity based on the current age (delay in the queue) and Depth Severity (col. 6, lines 27-45), i.e., the weight of the depth of each queue is applied to the delay for selecting a packet to be transmitted.

Regarding claim 2, McConnell further discloses that the current age is measured based on a time stamp for arrival time (col. 6, lines 64-66), i.e., the difference between a current time and arrival time is calculated for the delay.

Regarding claims 14 and 16, refer to the discussion for the claims 1 and 3. McConnell discloses a link scheduler (frame server 58 in FIG. 3).

Regarding claim 15, refer to the discussion for the claim 2.

Regarding claim 27, refer to the discussion for claim 1. McConnell discloses a processor (frame server 58 in FIG. 3).

Allowable Subject Matter

3. Claims 4-13 and 17-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 05/21/2004 have been fully considered but they are not persuasive

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In page 4 of the Remarks, Applicant argues that congestion severity measure determined for each queues in McConnell does not constitute a weighted version of a computed delay measure as claimed, because McConnell teaches in col. 8, lines 10-17, that the age severity and depth severity are treated independently in establishing the congestion severity. Examiner disagrees.

With reference to col. 7, lines 10-15, McConnell teaches that the congestion severity status for a queue is defined by two components, namely a depth severity component and an age severity component.

With reference to FIG. 6, step 72, 78, 88, and 102, McConnell teaches that the age severity and the depth severity are not treated independently to determine the highest congestion severity for each queue.

For the reasons as discussed above, Examiner believes that the claim rejection is proper.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

6. Any response to this final action should be mailed to:

Box AF

Commissioner for Patents


P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry

4/
S. Hyun

08/06/2004


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